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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,979	09/05/2003	Frederik D. Penz	60060.0002US01	9734
23552	7590	05/05/2005	EXAMINER	
MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			RESTIFO, JEFFREY J	
		ART UNIT	PAPER NUMBER	
		3618		

DATE MAILED: 05/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/656,979	PENZ, FREDERIK D.
Examiner	Art Unit	
Jeffrey J. Restifo	3618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 11 February 2005.
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-16, 20-22, 29, 30 and 32-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-16, 20-22, 29, 30 and 32-39 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 05 September 2003 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election without traverse of species B in the reply filed on 2/11/05 is acknowledged.

***Drawings***

2. Figures 3 and 4 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Objections***

3. Claims 1-14 are objected to because of the following informalities: Claims 1 and 8 recite the phrase "the plenum body" in line 5. there is insufficient antecedent basis for this term. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 8-11, 16, 20-22, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Scadding (US 4,706,615 A).

Scadding discloses a vehicle (or go-kart) which conventionally have a frame, four wheels, seat, and drive linkage, said vehicle further comprising a heat exchanger system for a vehicle comprising a body 10 defining an intake opening 26 (or bare duct) having a cross section area smaller than an expansion chamber which holds a heat exchanger 18 and fan 20 (inherently with vanes), wherein the expansion of the body cross section area results in a decrease in pressure, as is well-known in common hydraulics, as shown in figure 1. The term “go-kart” has been taken to be synonymous with vehicle by the examiner.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-7, 12-15, 30, 32-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scadding (US 4,706,615 A) and in further view of Layne et al. (US 5,894,987 A).

Scadding discloses a vehicle (or go-kart) which conventionally have a frame, four wheels, seat, and drive linkage, said vehicle further comprising a liquid cooled engine 24, a heat exchanger system for a vehicle including a plenum body 10 defining an intake opening 26 (or bare duct) having a cross section area smaller than an expansion chamber which holds a heat exchanger 18 and fan 20 (inherently with vanes), and an exit opening 30 having a cross sectional area smaller than the expansion chamber, wherein the expansion of the body cross section area results in a decrease in pressure, as is well-known in common hydraulics, as shown in figure 1. The term "go-kart" has been taken to be synonymous with vehicle by the examiner. Scadding does not disclose the ratio of the expansion chamber cross sectional area to the intake cross sectional area being 4.2. The exact ratio is not patentable unless it produces an unexpected result, further, Layne et al. disclose an adjustable air inlet for a vehicle thermal control, which suggests that any ratio would be obvious and may be desired under certain conditions to achieve a desired pressure or temperature. Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to have provided the engine cooling system of Scadding with the adjustable intake opening of Layne et al. in order to adjust pressure and temperature, which would also be able to create a cross sectional ratio of 4.2.

With respect to claims 5, 6, 12, 13, 30, 36, 37, Scadding does not disclose the power source of the fan. It would have been obvious to one having ordinary skill in the art at the time of the invention to have run the fan of Scadding off of numerous sources including the engine, axle, or separate motor, which are all well known in the art.

With respect to claims 32, and 39, Scadding does not disclose the number of fins per inch of the radiator. The number of fins on the heat exchanger is not patentable unless it produces an unexpected result, in this case it would have been obvious to increase the number of fins of the Scadding radiator to at least 17 per inch in order allow for sufficient cooling ability, as is well-known in the art.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey J. Restifo whose telephone number is (571) 272-6697. The examiner can normally be reached on M-F (10:00-6:00), alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher P. Ellis can be reached on (571) 272-6914. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JJR

Jeffrey J. Restifo  
Examiner  
Art Unit 3618